

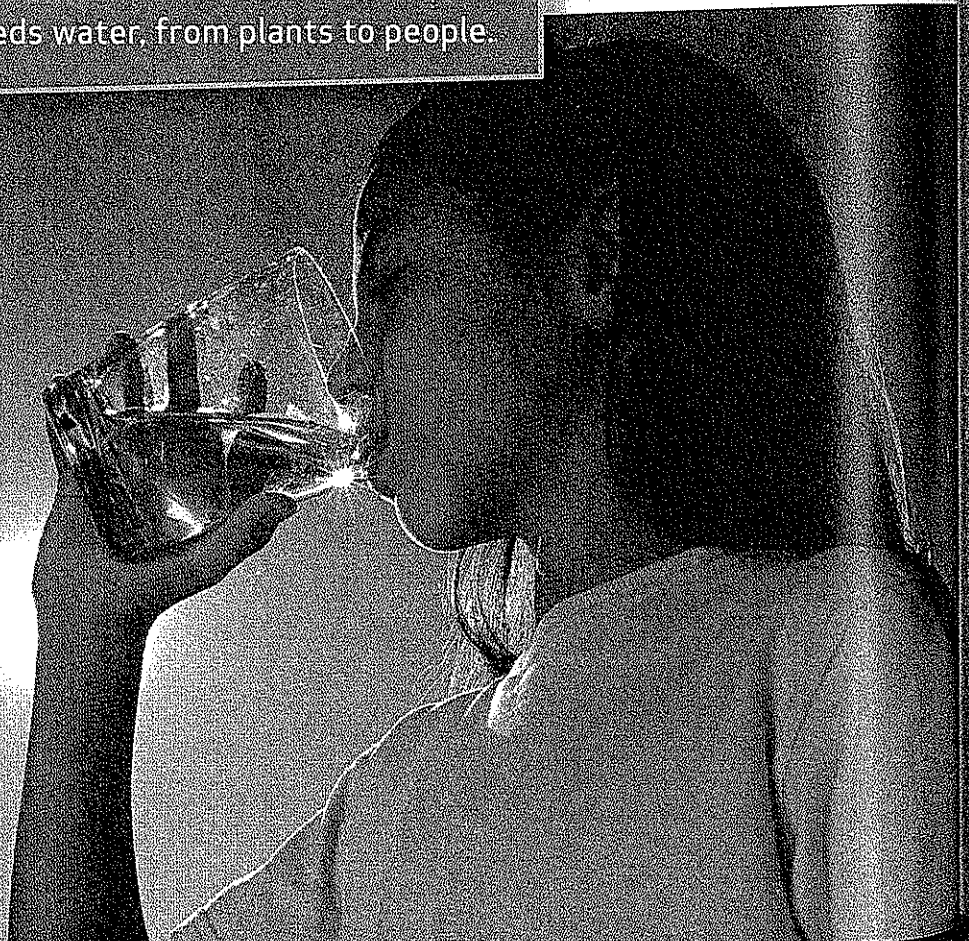
Chapter 2

Running Water, Moving Ice

Water plays an important role in shaping and changing Earth. It is always on the move—in rivers, lakes, and oceans, and in the sky. Water that falls from the sky is called precipitation. Rain, snow, mist, and hail are all kinds of precipitation.

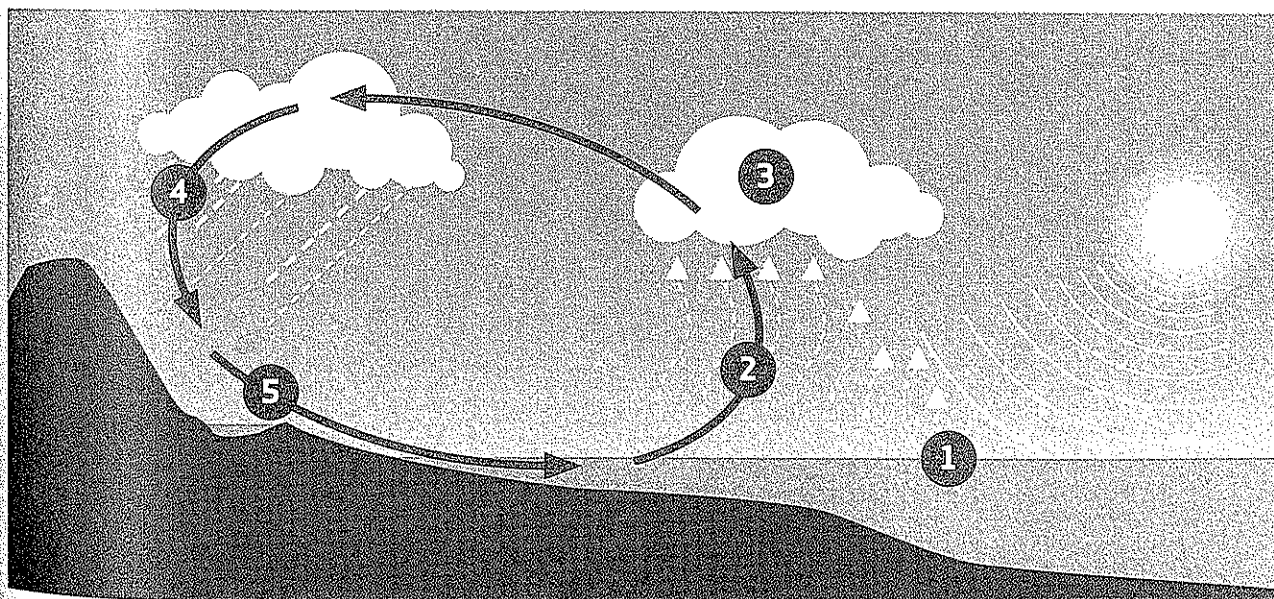
Water on Earth is never used up. As you have learned, it moves around and around in a cycle.

Every living thing needs water, from plants to people.



Let's take a closer look at the water cycle. When the sun heats water on Earth's surface, the water changes into a gas called water vapor. The vapor rises into the sky. As it rises, it gets cooler and turns into tiny droplets. These droplets form clouds, which get denser and colder. The droplets join together to form bigger drops of water. They fall to Earth again as precipitation.

The Water Cycle



1 Water turns into vapor.

2 Water vapor rises.

3 Clouds form.

4 Precipitation falls on the land.

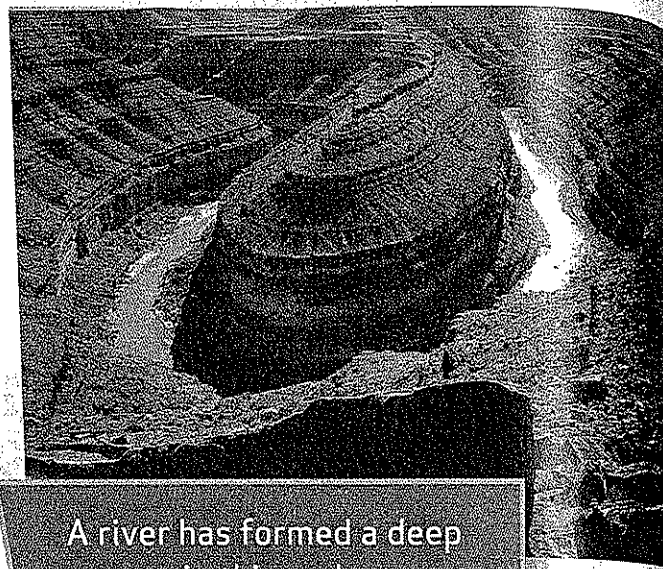
5 Water flows into rivers, lakes, and oceans.



Rivers and Rainwater

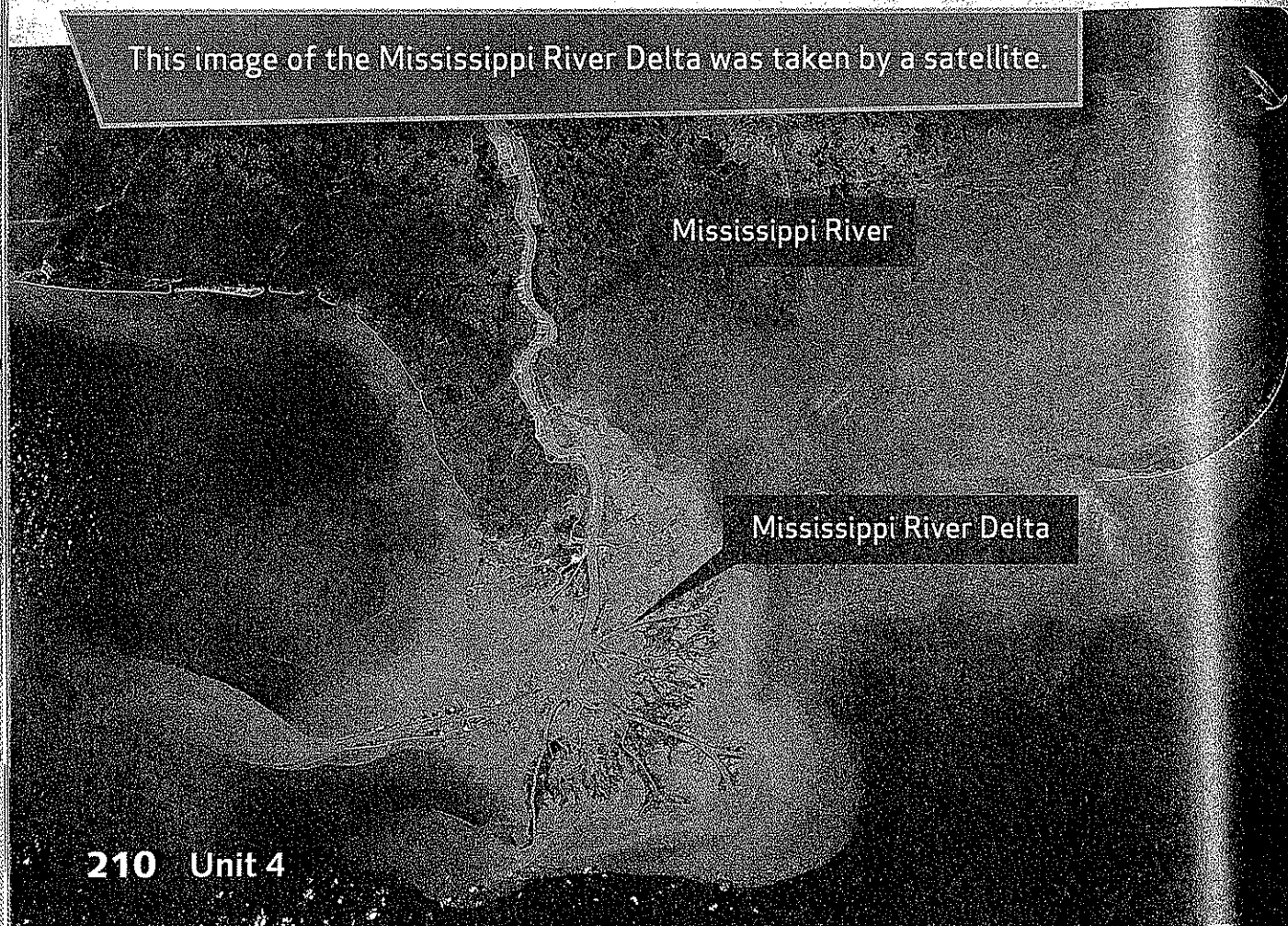
Over millions of years, moving water changes Earth's surface. Rivers can cut into rock to make valleys or deep canyons.

Water also washes soil and rock from hills and mountains down onto plains. Large rivers often carry soil to where the river meets the ocean or a lake. This soil can form a triangle of land called a delta.



A river has formed a deep canyon in this rock.

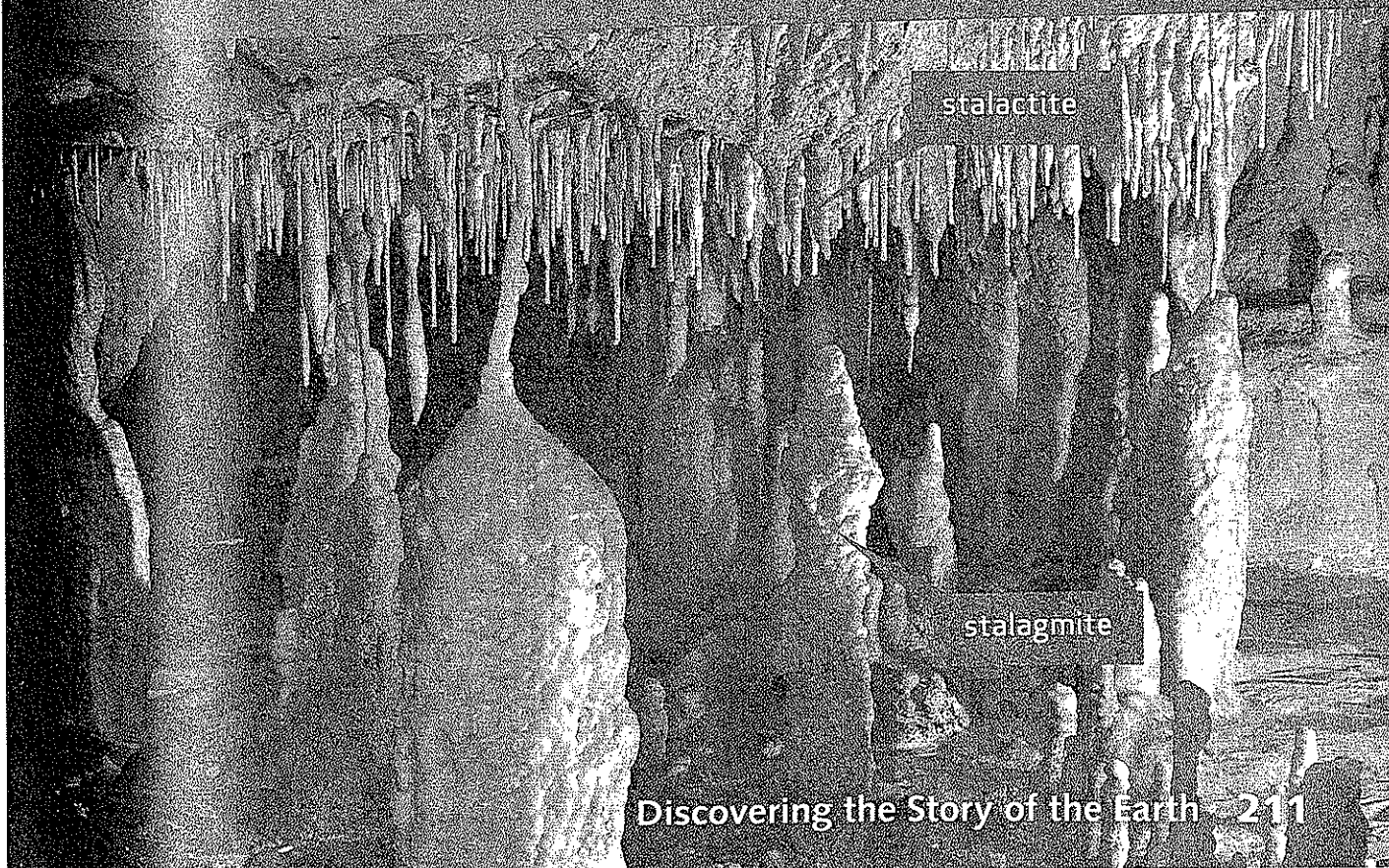
This image of the Mississippi River Delta was taken by a satellite.



Rainwater **trickles** through cracks in the ground and down into Earth. Over time the water wears away the rock and soil. It makes tunnels or caves. Most large caves form in a soft rock called limestone.

Underground Caves

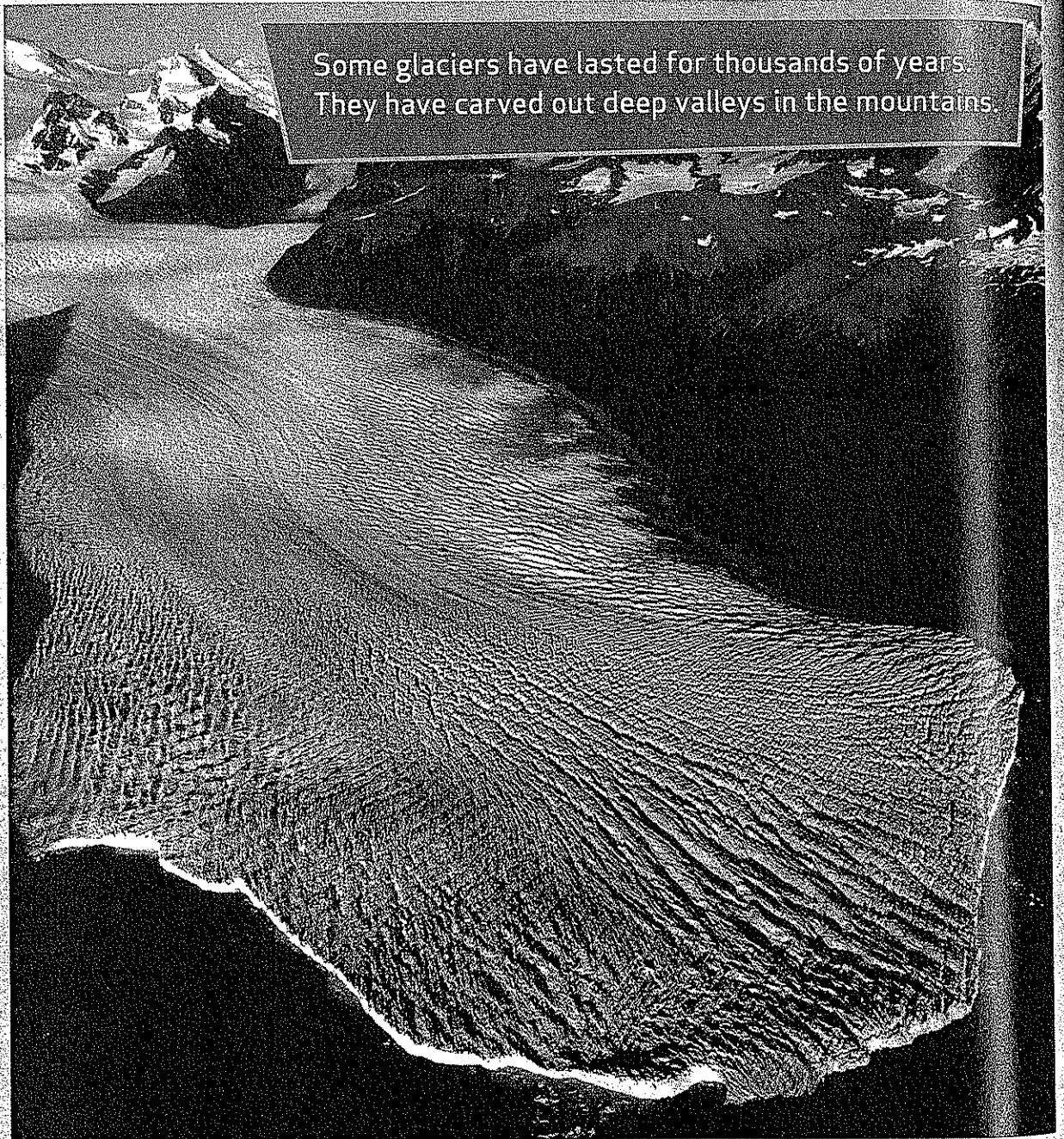
In some caves stalactites hang from the roof or walls. Stalactites are formed when water drips through the ceiling of a cave. The water leaves behind a small amount of a mineral. Slowly the stalactite grows down, like an icicle. Stalagmites grow up when water drips onto the cave floor.





Glaciers and Fjords

Some water moves very slowly. Glaciers are rivers of ice. They creep downhill over hundreds of years. As they move, they carve deep valleys in the rock. Glaciers can even push huge rocks along.



Some glaciers have lasted for thousands of years. They have carved out deep valleys in the mountains.



This fjord is near Olden, Norway.

Over many centuries a glacier can carve a long, narrow valley all the way down to the ocean. Sometimes the glacier melts. Then the valley can fill with seawater. This sea-filled valley is called a fjord (feeORD). Many fjords have very steep sides. They can be thousands of feet deep.